

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A personal recording and playback system (10) comprising:

a receiving means (19,21) for receiving streaming audio/visual input from at least one of broadcast radio, broadcast TV stations, cable TV systems, satellite TV systems, the Internet, and other wide-area networks;

a means (21) for connecting to wide area networks including the Internet and receiving streaming audio or audio/visual input;

a storage means (36) for storing the received streaming audio or audio/visual input;

a user input means (12) for inputting user commands to the recording/playback system (10);

a user output means (14) for outputting the audio or audio/visual input; and,

a recording means (32) for transparently:

tracking audio or audio/visual preferences of a user of the system (10);

maintaining a user profile database (34) for storing and maintaining user preferences;

receiving multiple audio or audio/visual streams via the receiving means (19,21) and storing the received multiple audio or audio/visual streams on the storage means (36) in the background; and,

maintaining an audio or audio/visual recording collection (48,50)

according to the user preferences by analyzing the received audio/visual streams; and

a content analysis means (56) for examining and improving a quality of an audio or audio/visual stream and identifying at least one of: a profile of the stream, voice over sections of the stream, degraded sections of the stream, and commercial detection,

wherein the content analysis means (56) improves the quality of the audio or audio/visual stream by comparing a title in the audio or audio/visual recording collection (48, 50) to a title stored in a real time file system or a common memory and by replacing (i) a title in the audio or audio/visual recording collection (48, 50) with a title stored in the real time file system or the common memory or (ii) portions of the title in the audio or audio/visual recording collection in order to remove voice over portions or defects of any kind or commercials.

2. (Original) The system as set forth in claim 1, further including:
virtual channels (42) stored on the storage system (36), each virtual channel
configured with a virtual channel profile defining the types of audio or audio/visual streams
to be included in the virtual channel and, wherein the recording means further:

updates the virtual channels by selectively including received audio or
audio/visual streams in each virtual channel which matches the virtual channel profile.

3. (Original) The system as set forth in claim 1, further including:
a most-popular list means (38) for storing the most often broadcasted
audio/visual streams, and, the recording means further:

updates the most-popular list with the most often broadcasted audio or
audio/visual streams.

4. (Original) The system as set forth in claim 1, further including:
a selection means (16) for playing audio or audio/visual streams selected by
the user via the input device (12) on the user output device (14) from one of:
the receiving means (19,21); and,
the audio/visual collection (48,50).

5. (Original) The system as set forth in claim 4, further including:
a fingerprint analysis means (58) for identifying audio or audio/visual streams
by matching a portion or portions of the stream to fingerprints stored in one of a local
fingerprint database (60) and a remote fingerprint database (62).

6. (Cancelled)

7. (Original) The system as set forth in claim 4, further including a video
removal means (68) for removing a video portion from an audio/visual stream, leaving an
audio portion.

8. (Original) The system as set forth in claim 4, further including:
a format-check means (30) for determining and decoding a format of an audio
or audio/visual stream, the formats including:

MPEG2;

MPEG4;

MP3;

Ogg Vorbis;

DIVX;
Realplayer Real-Video;
Realplayer Real-Audio;
Microsoft Windows Media;
Microsoft Netshow;
Apple Quicktime;
Xing StreamWorks; and
analog.

9. (Original) The system as set forth in claim 8, further including:
a plug-in database means (64) for storing and retrieving plug-ins to enable the
format check means (30) to determine and decode additional audio or audio/visual stream
formats.

10. (Currently Amended) A personal recording and playback system (10)
according to claim 1 wherein comprising:

~~a receiver (19,21) which receives streaming audio or audio/visual input from
at least one of:~~

~~analog broadcast radio/TV stations;~~
~~cable TV systems;~~
~~satellite TV systems;~~
~~and, Internet servers;~~
~~a memory (36) in which the received streaming audio or audio/visual input is
stored;~~

~~a user input/output (12,14) through which user commands and queries are
input and audio or audio/visual streams and queries are output; and,~~

the system includes a processor (32) programmed to:
track audio or audio/visual preferences of a user of the system (10);
maintain a user profile database (34);
receive multiple audio or audio/visual streams in the background via the
receiver (19,21) and store the received multiple audio or audio/visual streams in the memory
(36); and,

maintain an audio or audio/visual recording collection (48,50) in the memory
according to the user preferences by analyzing the received audio/visual streams.

11. (Original) The system as set forth in claim 10, further including:
a selection processor (16) configured to select audio or audio/visual streams selected by the user to be played by the input/output (12,14), the audio or audio/visual streams being selected from one of:
the receiver (19,21); and,
the audio/visual collection (48,50).

12-16. (Cancelled)

17. (Currently Amended) A method for maintaining an audio/visual collection in a device having a memory for storing audio/visual content and a processor that executes the method comprising:

receiving one or more audio or audio/visual streams in a background process transparent to a user;

storing the received audio or audio/visual streams in a memory of the device for subsequent analysis;

monitoring the playback preferences of the user;

maintaining in a memory of the device a user preference profile including the user playback preferences;

storing and maintaining the audio or audio/visual streams in a video/audio collection (48,50) in a memory of the device;

analyzing and matching the recorded audio or audio/visual streams to the user preference profile; and, and, at least one of:

examining and improving a quality of an audio or audio/visual stream and identifying at least one of: a profile of the stream, voice over sections of the stream, degraded sections of the stream, and commercial detection,

wherein improving the quality of the audio or audio/visual stream comprises comparing a title in the audio or audio/visual recording collection (48, 50) to a title stored in a real time file system or a common memory and replacing (i) a title in the audio or audio/visual recording collection with a title stored in the real time file system or the common memory or (ii) portions of the title in the audio or audio/visual recording collection (48, 50) in order to remove voice over portions or defects of any kind or commercials

discarding the queued stream if unmatched to a user preference;

storing the queued stream in the audio or audio/video collection if matched to a user preference and not previously stored in the audio/video collection; or,

~~using the queued stream to selectively improve a matching, previously stored audio or audio/visual stream in the audio or audio/video collection; and, playing the stored audio or audio/visual streams.~~

18. (Original) The method as set forth in claim 17, wherein the step of maintaining a user profile further includes:

maintaining one or more virtual channels, each virtual channel configured according to specific user preferences and including stored audio or audio/video collection streams matching the specific user preferences.

19. (Original) The method as set forth in claim 18, wherein the step of storing the queued stream includes:

selectively adding the stored stream to the virtual channels.

20. (Original) The method as set forth in claim 17, wherein the step of maintaining a user profile further includes:

maintaining a most-popular list including a configured number of stored audio or audio/video collection streams most often received.

21. (Original) The method as set forth in claim 17, further including at least one of:

identifying each of the audio or audio/visual streams by matching its fingerprint to a local fingerprint database entry;

identifying each of the audio or audio/visual streams by matching its fingerprint to a remote fingerprint database entry; and,

subtracting the video portion from an audio or audio/visual stream to produce an audio stream.